

CLAIMS

What is claimed is:

1. Fuel supply system comprising:
 - a sub-tank positioned in fuel tank;
 - a fuel pump positioned in the sub-tank, said fuel pump adapted to suck fuel from the sub-tank and discharge fuel from the sub-tank;
 - a throat provided in a bottom portion of the sub-tank, said throat opened at one end thereof as a suction port to an exterior of the sub-tank, said throat open at another end as a supply port to the interior of the sub-tank;
 - a jet pump having a nozzle portion opposed to the suction port, wherein fuel is ejected from the nozzle portion into the interior of the throat, the fuel in the exterior of the sub-tank being thereby sucked from the suction port and supplied to the interior of the sub-tank; and
 - a check valve provided in the sub-tank, said check valve closing the supply port with only weight of the check valve, said check valve adapted to prevent the fuel in the sub-tank from flowing out to an exterior of the sub-tank through the throat;
 - the throat positioned incliningly with respect to a bottom surface of the sub-tank so that a height of the

throat increases gradually from the suction port toward the supply port with a plane of an opening of the supply port extending substantially vertically.

2. Fuel supply system comprising:

a sub-tank positioned in fuel tank;

fuel pump positioned in the sub-tank, said fuel pump sucking fuel from the sub-tank and discharging resultant fuel from the sub-tank;

a throat provided in a bottom portion of the sub-tank, said throat open at one end as a suction port to an exterior of the sub-tank, said throat open at another end as a supply port to an interior of the sub-tank;

a jet pump having a nozzle portion opposite the suction port, fuel being ejected from the nozzle portion into an interior of the throat, fuel exterior of the sub-tank being thereby sucked from the suction port and supplied to the interior of the sub-tank; and

a check valve provided in the sub-tank, said check valve closing the supply port by only weight of the check valve, said check valve preventing fuel in the sub-tank from flowing to the exterior of the sub-tank through the throat; and

the throat inclined with respect to a bottom surface of the sub-tank so that a height of the throat increases gradually from the suction port toward the supply port with a plane of an opening of the supply port

extending so as to cross an axial direction of the throat
at substantially right angles.

FIG. 10